

# SYSTEMS & SYNTHETIC BIOLOGY (SSB)

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## **SSB 099 – Special Study for Undergraduates (1-5 units)**

*Course Description:* Special study for undergraduates.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Variable 3-15 units.

*Repeat Credit:* May be repeated for credit.

*Grade Mode:* P/NP only.

## **SSB 134 – Systems Biology: From Biological Circuits to Biological Systems (3 units)**

*Course Description:* Application of systems theory to understanding the properties of biological networks in a variety of model organisms. Local biological circuits and genome-scale biological networks. Network motifs, robustness, modeling, emergent properties and integration of networks.

*Prerequisite(s):* (BIS 101 or BIS 101V); (MCB 121 or PLB 113); (MAT 016C or MAT 017C or MAT 019C or MAT 021B or MAT 021BH); or consent of instructor; BIS 015L recommended.

*Learning Activities:* Lecture/Discussion 3 hour(s).

*Credit Limitation(s):* Not open for credit if student has taken BIS 134.

*Grade Mode:* Letter.

*General Education:* Science & Engineering (SE).

## **SSB 199 – Special Study for Advanced Undergraduates (1-5 units)**

*Course Description:* Special studies for advanced undergraduates.

*Prerequisite(s):* Consent of instructor.

*Learning Activities:* Variable 3-15 hour(s).

*Repeat Credit:* May be repeated for credit.

*Grade Mode:* P/NP only.